

WHAT IS CLAIMED IS:

- 1 4. The method of claim 1, wherein the image quality
2 information indicates the quality of the at least one image
3 represented by said image data.

9. The method of claim 1, wherein the received information further includes image source information which indicates a format in which the at least one image represented by said image data was previously stored; and wherein the step of selecting a first encoding format is further performed as a function of the received image source information.

1 10. The method of claim 1, wherein the received
2 information further includes image source information which
3 indicates a type of data storage media which was previously
4 used to store said image data prior to performing said
5 encoding step; and

6 wherein the step of selecting a first encoding
7 format is further performed as a function of the data
8 storage media information.

1 11. The method of claim 10, wherein the indicated type of
2 data storage media includes at least one of digital tape,
3 analog tape and movie film.

1 12. The method of claim 1, further comprising the step of:
2 selecting the quality level at which the at least
3 one image represented by said image data is to be encoded
4 using the selected image format based on the received
5 information.

1 13. The method of claim 12, wherein the quality level is
2 selected from a plurality of supported encoding quality
3 levels.

1 14. The method of claim 13, wherein the plurality of
2 supported encoding quality levels include a first quality
3 level which is a lossless or near loss-less quality level;
4 a second quality level which is a contribution quality
5 level; and a third quality level which is a distribution
6 quality level, the distribution quality level being the
7 level of image quality to be used for distribution of the
8 image to an end viewer.

FOUO-SECRET

4 wherein the step of selecting the quality level
5 at which the at least one image is encoded is further
6 performed as a function of the received data storage
7 limitation information.

5 wherein the step of selecting the quality level
6 ~~at~~ which the at least one image is encoded is further
7 performed as a function of the received image source
8 information.

6 wherein the step of selecting the quality level
7 at which the at least one image is encoded is further
8 performed as a function of the received image source
9 limitation information.

1 18. The method of claim 1, wherein said plurality of image
2 formats includes at least two of the encoding formats in
3 the set of MPEG, JPEG and DV encoding formats.

10 24. The method of claim 22, wherein the step of converting
2 the first encoded image data from the first encoding format
3 to a second encoding format includes:

4 decoding said first encoded image data to
5 generate decoded image data; and
6 re-encoding said decoded image data according to
7 the second encoding format.

1 25. A digital storage medium comprising computer
2 executable instructions for controlling a computer system
3 to:

4 receive information including at least one of
5 image quality information and image use information;

6 select a first encoding format from a plurality
7 of supported encoding formats as a function of said
8 received information;

9 encode image data according to the first encoding
10 format to thereby generate first encoded image data
11 representing said image; and

12 store the first encoded image data using a
13 digital data storage device.

1 26. A system for processing and storing at least one of
2 audio and video data, the system comprising:

3 a compression module supporting a plurality of
4 different encoding formats, the compression module
5 including a plurality of encoding modules, each encoding
6 module capable of performing data encoding according to a
7 different standardized encoding format;

8 a control module for selecting from the plurality
9 of encoding formats, an encoding format to be used with a
10 given set of data supplied to the compression module; and

TOP SECRET

1 27. The system of claim 26, further comprising:
2 a data retrieval module for retrieving encoded
3 data stored in the data storage device; and
4 a transcoder module for converting encoded data
5 retrieved from the data storage device from a format in
6 which the data was stored to a different data format.

3 a plurality of decoders, each decoder in the
4 plurality of decoder circuits being capable of decoding at
5 least one of said encoding formats supported by the
6 compression module.

3 a plurality of encoders coupled to the plurality
4 of decoder, the plurality of encoders including encoders
5 which support different encoding formats.

3 means for outputting data generated by multiple
4 encoders included in said plurality of encoders, from the
5 same decoded data generated by one of said plurality of
6 decoders.

1 31. The system of claim 27, further comprising:

2 an analysis module capable of performing an
3 indexing operation on encoded data and generating index
4 information therefrom; and

5 a wrapper module coupled to said compression
6 module, the storage device and the analysis module, the
7 wrapper module supplying encoded data generated by said
8 compression module to said analysis module and
9 incorporating index information received from said analysis
10 module into a file with the encoded data supplied to said
11 analysis module.

1 32. The system of claim 31, wherein the data analysis
2 module includes:

3 decoder circuitry for decoding encoded data; and
4 an indexing circuit for generating indexing
5 information by analyzing decoded data generated by said
6 decoder circuitry.

1 33. The system of claim 31, wherein said data retrieval
2 module is coupled to said storage device and the analysis
3 module, the data retrieval module controlling the retrieval
4 of encoded data from the storage device to be supplied to
5 the analysis module for indexing; and

6 wherein the analysis module indexes retrieved
7 encoded data to generate index information.

1 34. The system of claim 33, further comprising:

2 an archive storage manager module for coupling
3 the data retrieval module to the analysis module and for
4 adding index information generated by said analysis module

TOP SECRET

5 from processing retrieved encoded data to the file from
6 which the encoded data was retrieved.

1 35. The system of claim 27, further comprising:
2 a preview module coupled to said transcoder for
3 displaying images generated from encoded data produced by
4 said transcoder.

1 36. The system of claim 28, further comprising:
2 a preview module coupled to said compression
3 module for displaying images generated from encoded data
4 generated by said compression module.

1 37. The system of claim 26, further comprising:
2 means for receiving information including at
3 least one of image quality information and image use
4 information; and
5 wherein the control module includes:
6 means for selecting the encoding format
7 to be used with a given set of data supplied to
8 the compression module as a function of said
9 received information.

1 38. A method of operating a system to process image data
2 representing an image, the method comprising:
3 receiving image source information indicating at
4 least one of a type of storage media previously used to
5 store the image data and a storage format in which the
6 image data was stored;

TOP SECRET

7 automatically selecting a first encoding format
8 from a plurality of supported encoding formats as a
9 function of said received information;

10 operating the system to encode said image data
11 according to the first encoding format to thereby generate
12 first encoded image data representing said image; and

13 storing the first encoded image data using a
14 digital data storage device.

1 39. The method of claim 38, wherein the received image
2 source information indicates the type of storage media
3 previously used to be at least one of digital tape, analog
4 tape, and movie film.

1 40. The method of claim 38, wherein the received image
2 source information indicates the source format to be one of
3 a JPEG, a DV and an MPEG format.

1 41. The method of claim 38, further comprising the steps
2 of:

3 retrieving the first encoded image data from the
4 digital data storage device;

5 converting the first encoded image data from the
6 first encoding format to a second encoding format to
7 produce second encoded image data, the second encoded
8 format being different from the first encoding format; and
9 outputting the second encoded image data.

1 42. The method of claim 41, further comprising:

2 converting the first encoded image data from the
3 first encoding format to a third encoding format to produce

TOUCHED: 6/24/00

1 47. The method of claim 46, further comprising:
2 analyzing said image data to generate the
3 received image quality information.

1 48. The method of claim 46, wherein the step of selecting
2 the encoding quality level includes selecting an encoding
3 quality level which will preserve the image at a level of
4 quality equal to or lower than the indicated quality of the
5 image represented by said image data.

1 49. The method of claim 46, wherein the image quality
2 information further indicates a minimum level of image
3 quality at which an image is to be preserved; and
4 wherein the step of selecting the encoding
5 quality level includes selecting an encoding quality level
6 which will preserve the image at a level of quality lower
7 than the indicated quality of the image represented by said
8 image data but at least as high as the minimum level of
9 image quality at which the image is to be preserved.

1 50. The method of claim 49, further comprising:
2 querying a human for said image quality
3 information.

FOUO-SECRET